



GEORGETOWN UNIVERSITY

# Masters Program in Mathematics and Statistics

Department of Mathematics  
Box 571233  
Georgetown University  
Washington, DC 20057-1233  
USA



## Georgetown University Masters Program in Mathematics and Statistics

**Beginning in Fall 2006**

- Preparation for careers in fields as varied as computational sciences, financial modeling, biosciences, and defense
- Career development for working professionals through advanced training in applied mathematics and statistics
- Courses in fields such as computational mathematics and statistics, signal processing, financial modeling, data mining, and stochastic processes

Georgetown University  
Department of Mathematics

Email: [msmathstat@georgetown.edu](mailto:msmathstat@georgetown.edu)  
Phone: 202-687-6244 or 202-687-6214

<http://www.georgetown.edu/departments/math/grad/main.htm>

# Masters Program in Mathematics and Statistics

## New Professional Masters Degree in the Mathematical Sciences

Beginning in the Fall of 2006, Georgetown University will offer a Master of Science degree in Mathematics and Statistics.

- Prepare for a professional career in areas as varied as computational science and engineering, financial modeling, and bioinformatics.
- Learn skills useful for work in industries ranging from defense and homeland security to biotechnology and consumer finance.
- The program will be housed in the Department of Mathematics.
- The curriculum is based on four core courses in mathematics and statistics, followed by specialized courses in either mathematics or statistics. Emphasis is placed on broad knowledge in the mathematical sciences, practical experience in consulting and internships, and communication skills.
- The degree can be completed in three semesters of full-time study or in five to six semesters of part-time study. A mathematical background equivalent to a minor in mathematics is desirable but not necessary. One-credit refresher courses will be offered to fill gaps in the preparation of entering students.



## A Program that is Open, Flexible, and Accessible

- **Flexible.** Thirty-one graduate credits (27 course credits and four credits for internships and a practicum) are required for the degree. There is no thesis requirement. Each student will take four required courses and four elective courses in Mathematics and Statistics.
- **Customized to your interests.** A course in a nonmathematical science is also required. Examples range from chemistry to computational linguistics and neuroscience.
- **A solid core.** The four required courses cover areas such as differential equations, numerical methods, probability theory, and statistics.
- **Prepare for the modern workplace.** Elective courses will treat areas of applied mathematics and statistics such as signal processing, financial mathematics, regression methods, biostatistics, and data mining.
- **Immediate applications.** A consulting practicum (2 credits) and an internship (2 credits) will give students practical experience in solving problems for clients requiring mathematical expert advice.
- **Workplace skills.** Special emphasis is placed on effective communication, versatility in problem solving, and computational methods.
- **Internships.** Students holding internships will spend the equivalent of six to eight weeks in a professional environment related to their graduate training. Documented prior experience with quantitative work in a professional environment or two additional credits in the consulting clinic may be substituted.
- **Unique program, unique area.** Georgetown University offers the only professional degree on the Eastern Seaboard with close integration of mathematics and statistics and broad training. The Washington area offers opportunities for professional careers that require high level technical and quantitative skills.
- **Faculty mentoring.** The Department of Mathematics at Georgetown University is small and places high priority on teaching as well as research. Students will receive close personal attention from departmental faculty.
- **Convenience.** Courses will be offered on Georgetown University's Main Campus and elsewhere in the Metro area. The program will accommodate the needs of part-time students who live off-campus. Classes will meet once or twice a week, typically in the late afternoon or early evening.
- **Value.** Many employers offer tuition benefits to employees enrolled in a degree program. In addition, tuition payments may be tax-deductible. Members of the department and staff of Georgetown University's Graduate School of Arts and Sciences will be happy to provide further help and information.

## Learn the core technologies for success in the new multi-disciplinary workplace.

Mathematicians and statisticians work on problems as diverse as:

- airport scheduling
- circuit design
- design of clinical trials
- marketing surveys
- air quality measurements
- groundwater flow prediction
- optimization of stock portfolios
- quality control in chip manufacturing

